//Program to convert a Fahrenheit temperature to a Celsius temperature.

#include <iostream>

void initialize\_screen();

//Separates current output from

//the output of the previously run program.

double celsius(double fahrenheit);

//Converts a Fahrenheit temperature

//to a Celsius temperature.

void show\_results(double f\_degrees, double c\_degrees);

//Displays output. Assumes that c\_degrees

//Celsius is equivalent to f\_degrees fahrenheit.

int main()

{

using namespace std;

double f\_temperature, c\_temperature;

initialize\_screen();

cout << "I will convert a Fahrenheit temperature"

<< " to Celsius.\n"

<< "Enter a temperature in Fahrenheit: ";

cin >> f\_temperature;

c\_temperature = celsius(f\_temperature);

show\_results(f\_temperature, c\_temperature);

return 0;

}

//Definition uses iostream:

void initialize\_screen()

{

using namespace std;

cout << endl;

return;

}

double celsius(double fahrenheit)

{

return ((5.0 / 9.0) \* (fahrenheit - 32));

}

//Definition uses iostream:

void show\_results(double f\_degrees, double c\_degrees)

{

using namespace std;

cout.setf(ios::fixed);

cout.setf(ios::showpoint);

cout.precision(1);

cout << f\_degrees

<< " degrees Fahrenheit is equivalent to\n"

<< c\_degrees << " degrees Celsius.\n";

return;

}